SAN FERNANDO SUPERFUND SITE
AREA 1

Fact Sheet #2

Burbank, California
October 1988

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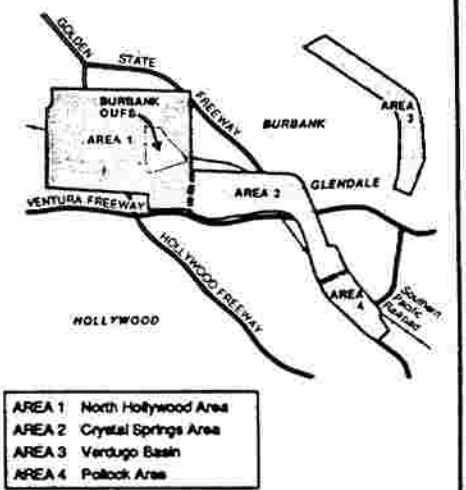


SAN FERNANDO SUPERFUND SITE
BURBANK OUFS - REGIONAL MAP

EPA, DWP, AND THE CITY OF BURBANK ANNOUNCE CLEAN-UP PLAN FOR BURBANK AREA

This fact sheet, prepared by the U.S. Environmental Protection Agency (EPA), the Los Angeles Department of Water and Power (DWP), and the City of Burbank is intended to inform you about the on-going investigation and cleanup of **groundwater** contamination in the San Fernando Valley. A draft **Operable Unit Feasibility Study (OUFS)** for the Burbank well field will be released for public review and comment in October of 1988. The purpose of the OUFS is to identify, evaluate, and recommend potential clean-up actions for the Burbank well field area which are consistent with the long-term efforts to remove and mitigate contaminated groundwater in the San Fernando Valley Groundwater Basin (SFVGB).

EPA's preferred alternative for the Burbank Well Field is to pump and treat contaminated water from new and existing wells in two phases. The first Phase will extract 12,000 gpm from eight new extraction wells and treat by air stripping with vapor phase **granular activated carbon (GAC)**. The treated water will be used directly by the City of Burbank's Public Service Department for drinking water in the City's service area. Phase II of the project involving additional extraction and reuse of the treated water will be determined after Phase I is operational. The remedy also includes provisions for continued ground water monitoring. The California Department of Health Services, the Los Angeles Department of Water and Power, the Metropolitan Water District and the City of Burbank support this project.

This fact sheet summarizes the alternatives considered in the OUFS and describes EPA's preferred clean-up method. It also describes the history of the site, explains the federal Superfund program, and indicates opportunities for public participation, including a new community relations activity -- Technical Assistance Grants (TAGs). In addition, a glossary of terms that appear in **BOLD** letters is found on page 6. The community is encouraged to participate in EPA's remedy selection process by commenting on all of the alternatives included in the OUFS, as well as the preferred alternative.

OPPORTUNITIES FOR COMMUNITY INVOLVEMENT

COMMUNITY MEETING

Residents of the San Fernando Valley are encouraged to attend an upcoming meeting regarding site investigation and clean-up. Staff will report on the clean-up alternatives and the proposed clean-up plan for the Burbank area. In addition, staff will respond to your questions.

Wednesday, November 9, 1988, 7 P.M.
Auditorium, Thomas Jefferson Elementary School
1900 North Sixth Street, Burbank, CA

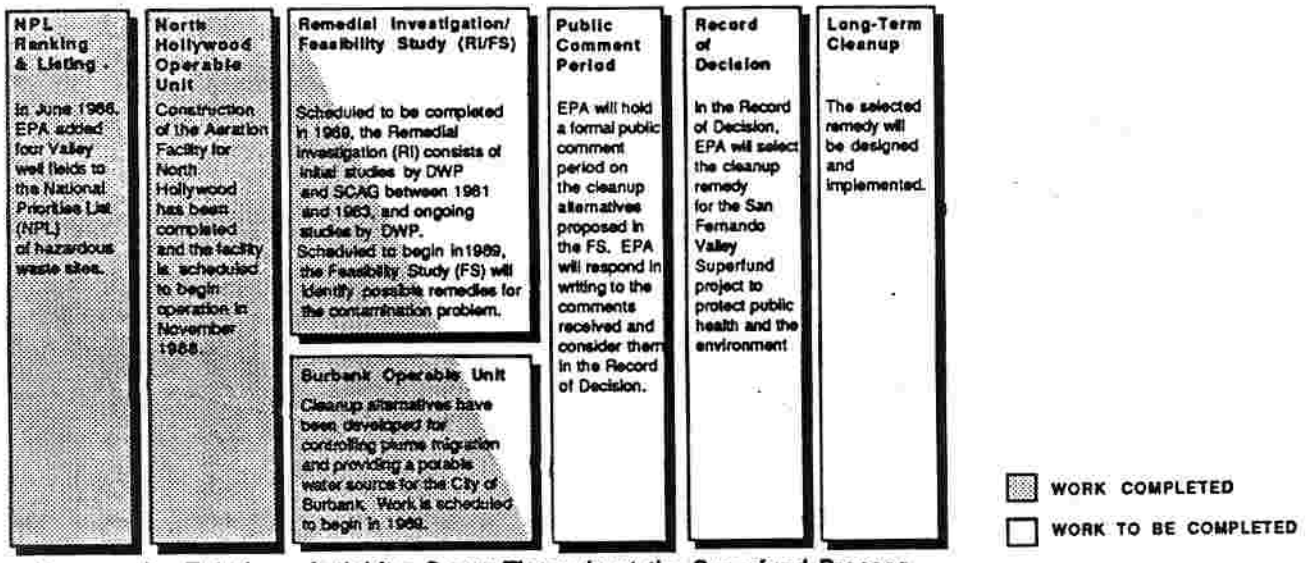
Community members are invited to comment on the various clean-up measures and the proposed plan for the Burbank area at the meeting. Comments also may be submitted in writing during the comment period, which closes November 18, 1988. (For further instructions regarding submitting comments, please see adjacent section.)

PUBLIC REVIEW AND COMMENT PERIOD

The public comment period on the alternatives to clean up the Burbank area will end November 18, 1988. Written comments on these alternatives, postmarked no later than that date, should be sent to the Remedial Project Manager, Patti Cleary, at the EPA address listed on the last page of this fact sheet. The OUFS report and all relevant site documents will be available for review at the information repositories listed on the last page of this fact sheet.

Comments may also be made by calling the Toll-Free Information Line at 800-231-3075.

SAN FERNANDO SUPERFUND PROCESS



Community Relations Activities Occur Throughout the Superfund Process

WHAT IS SUPERFUND?

Superfund is the commonly referred to name of the law passed by Congress in 1980 called the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLA gives EPA authority and makes funding available to respond to hazardous waste sites that threaten public health and the environment. The major step in the Superfund process is the **Remedial Investigation/Feasibility Study (RI/FS)**. In the first step, the Remedial Investigation (RI), EPA determines the nature and extent of contamination at the site. During the Feasibility Study (FS), EPA evaluates different methods for cleaning up the site, based on the information learned during the RI. Based on the FS and public comments submitted on EPA's proposed plan, EPA chooses a clean-up solution that both protects public health and is technically effective, reliable, feasible, and cost-effective.

In 1986, the President signed into law the Superfund Amendments and Reauthorization Act (SARA), which amended and reauthorized CERCLA for five years at a total funding level of $8.5 billion. SARA also strengthened state involvement in the clean-up process, and encouraged the use of treatment technologies and permanent solutions.

BACKGROUND ON THE GROUNDWATER CONTAMINATION IN THE SAN FERNANDO VALLEY GROUNDWATER BASIN

In late 1979, as a result of the passage of Assembly Bill 1803, the California Department of Health Services (DHS) requested that all major water purveyors using groundwater conduct tests for the presence of certain industrial chemicals in the water they were serving. The results of initial tests and of subsequent testing revealed a **volatile organic compound (VOC)** contamination problem in the San Fernando groundwater basin. The primary contaminants of concern were and are the solvents **trichloroethylene (TCE)** and **perchloroethylene (PCE)**, which are widely used for machinery degreasing, dry cleaning, and metal plating.

VOCs have been detected in the majority of the City of Burbank's wells at levels that are above the Federal **Maximum Contaminant Level (MCL)** for TCE which is 5 parts per billion (ppb). The State **Action Level** (SAL) for TCE is also 5 ppb. In addition, PCE levels above the SAL are also present in the majority of Burbank's wells. The SAL for PCE is 4 ppb. The highest measured level in Burbank's wells to date is 1800 ppb for TCE and 590 ppb for PCE. It should be noted that the State requires that customers be notified if the water being served is above the MCLs..

Other VOCs have been detected in trace quantities. The overall nature and extent of the groundwater contamination will be characterized during the remedial investigation. This contamination has resulted in the shutdown of all ten wells in the Burbank well field. The City of Burbank purchases water from the Metropolitan Water District (MWD) of Southern California in order to serve clean water that meets state and federal requirements to its customers. This water is more costly than using Burbank's groundwater and is a temporary measure only.

SELECTION OF CLEANUP ALTERNATIVES

PROJECT OBJECTIVES

Before identifying a range of cleanup alternatives for evaluation, the objectives of the cleanup must first be identified. In addition to the more specific objectives below, the chosen alternatives must, according to law, adequately protect public health and the environment, and be technically feasible and cost effective.

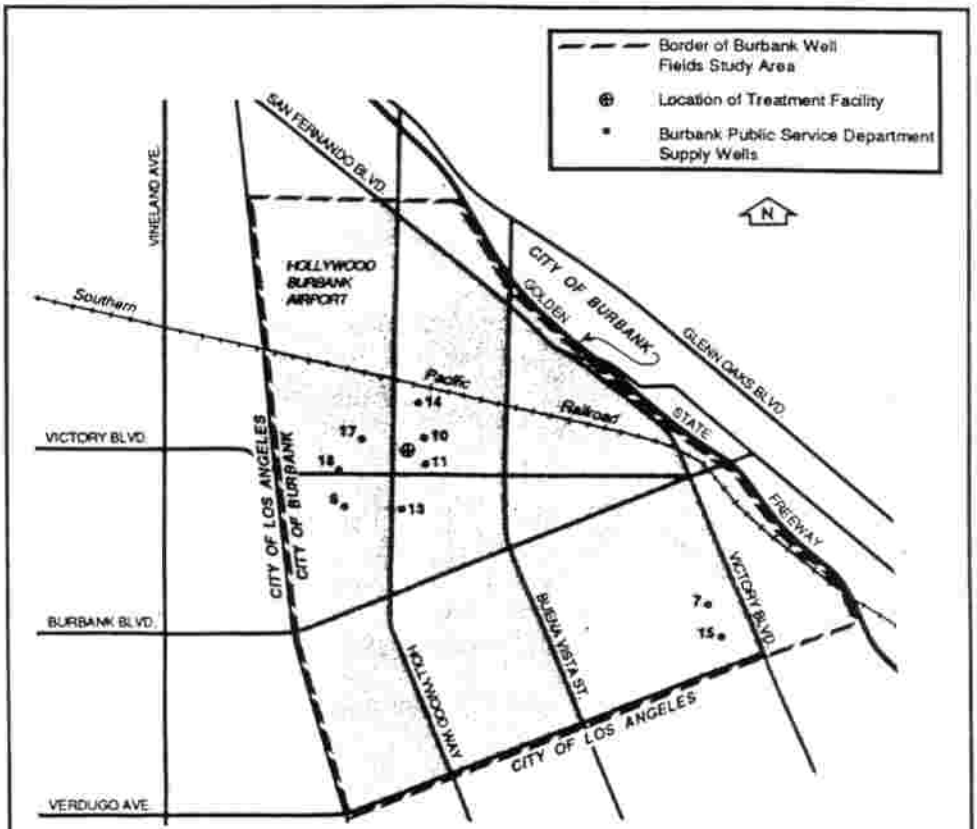
The cleanup objectives specifically chosen for the Burbank Operable Unit are listed below.

THE PRIMARY OBJECTIVES ARE:

- ☐ To provide residents in the affected cities with a water supply that meets State and Federal **drinking water standards**;and
- ☐ To control the movement of groundwater contaminants in the Burbank Operable Unit area of the San Fernando Valley Basin, which underlies the San Fernando Valley.

THE SECONDARY OBJECTIVES ARE:

- ☐ To reduce groundwater contamination in an area within the San Fernando Valley Groundwater Basin; and
- ☐ To develop a plan for clean-up that is consistent with the approach to be used in the future by EPA,. in the Burbank area and in the San Fernando Valley Basin, as a whole.



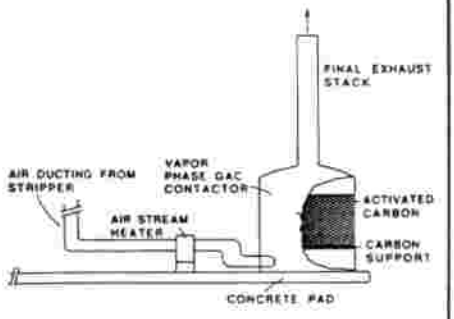
SAN FERNANDO SUPERFUND SITE, AREA 1, BURBANK WELL FIELD AREA

THE CLEANUP ALTERNATIVES

SUMMARY OF CLEANUP TECHNOLOGIES

Carbon Adsorption-Using this process, contaminants are removed by forcing (in a pressurized vessel) the contaminated groundwater through GAC. GAC has a very high surface area and a strong attraction for many organic compounds. Contaminated water would be pumped from the wells to the top of pressure vessels containing GAC. As the liquid flows down through the carbon beds, the VOCs would be removed from the water, by clinging to the carbon material, and the concentration of VOCs in the water would decrease.

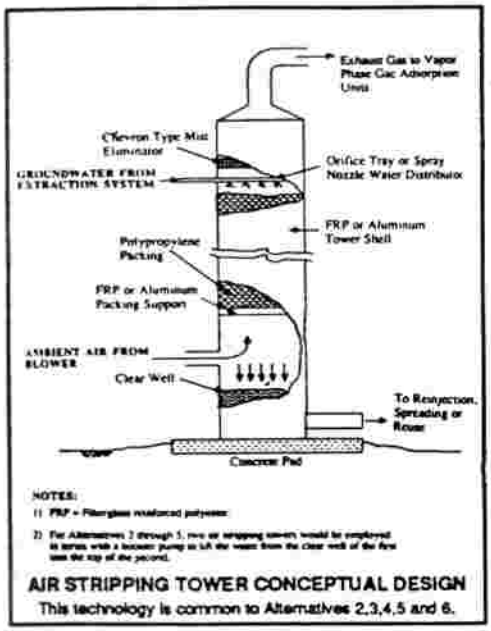
Carbon adsorption systems can be designed to use single or dual carbon beds. Dual-bed carbon adsorption allows for more efficient VOC removal and a higher safety margin than does the single-bed system because the water passes through two separate carbon beds instead of only one. The margin of safety is higher because if contamination isn't removed completely in the first bed, the second bed can provide additional treatment. Dual-bed systems do, however, involve a significantly higher capital cost than single bed systems.



CONCEPTUAL DESIGN OF VAPOR PHASE GAC ADSORPTION SYSTEM

This Technology is common to Alternatives 2,3,4,5 and 6.

Air Stripping-Air stripping involves a mass-transfer process in which a solute in water is removed by exposure to an air-water interface. The application of



AIR STRIPPING TOWER CONCEPTUAL DESIGN
This technology is common to Alternatives 2,3,4,5 and 6.

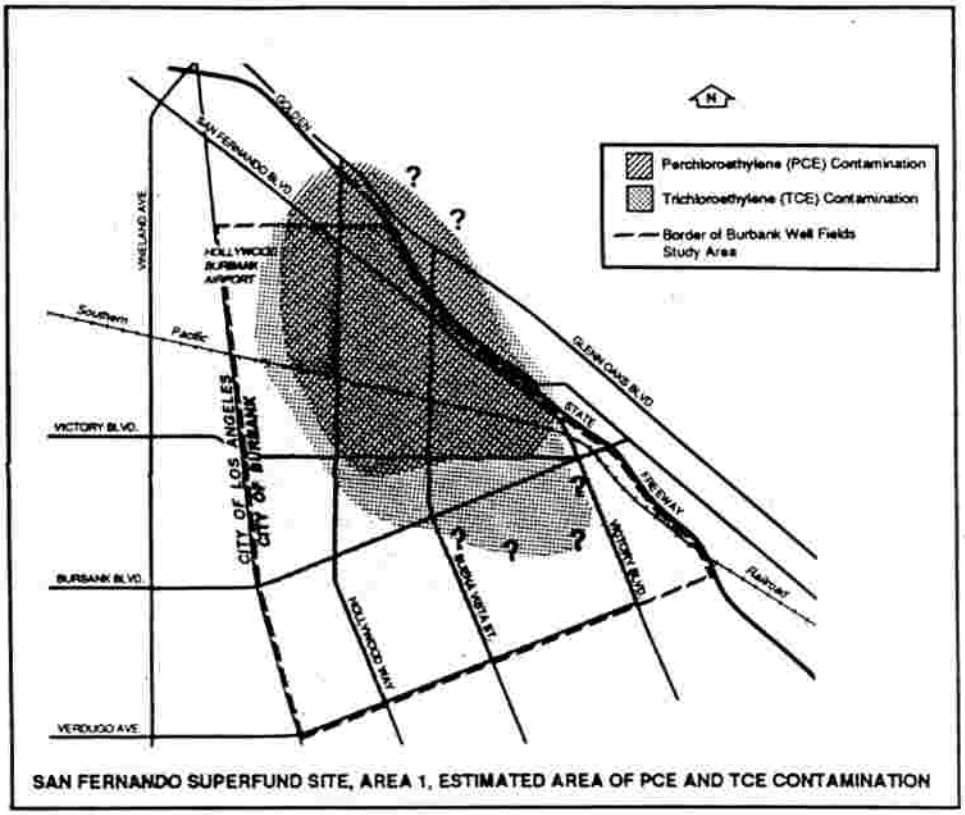
this process to groundwater is made by running a volume of groundwater treatment through a vertical column containing packing media. The media provides a large surface area over which a counter current flow of air is introduced. The contaminant is removed from the water once it is transferred to the air phase. Removal efficiencies of up to 99 percent can be achieved in properly designed packed towers. Air pollution control technologies can be added for control of VOC air emissions.

Air Stripping with Vapor Phase GAC- The VOCs removed from the water by the air stripper remain in the air that leaves the top of the tower. If it is necessary to control these VOC emissions, an off-gas carbon treatment system can be added to the air stripping system. Off-gas carbon treatment filters the air containing VOCs through a vessel containing granular activated carbon. Contaminants adsorb onto the carbon, thereby reducing the level of contaminants released into the air.

SUMMARY OF CLEANUP ALTERNATIVES

Six cleanup alternatives were evaluated using the following criteria: engineering feasibility, capital costs, operation and maintenance costs, environmental impacts, public health protection, and compliance with federal and state regulations.

After the public comment period, EPA will select one of these alternatives to clean up the Burbank Well Field area.



SAN FERNANDO SUPERFUND SITE, AREA 1, ESTIMATED AREA OF PCE AND TCE CONTAMINATION

1. *NO ACTION*

The No Action alternative serves as a basis for comparison with the other remedial alternatives under consideration. This alternative is evaluated to determine the risks that would be posed to public health and the environment if no action were taken to treat or contain the contamination. This option would include monitoring the ten existing Burbank Public Service Department (PSD) wells, quarterly, and to track the migration of the **contaminant plume**. The monitoring program would help to ensure that potable water would not be inadvertently used when concentrations of VOCs exceed MCLs or SALs.

2. *EXTRACT FROM EXISTING WELLS/ TREAT/REINJECT/REUSE*

This alternative includes pumping the water from eight PSD wells (located west of the highest TCE and PCE contamination) to an existing equalization basin to provide a uniform feed to the treatment facility. The water would be treated by eight sets of dual air strippers with vapor phase GAC adsorption systems for the off-gas (carbon air-filtering units). Treatment efficiency will produce water of a quality that meets or exceeds all federal and state **applicable or relevant and appropriate requirements (ARARs).** A portion of the treated water would be introduced into the Burbank PSD's existing distribution system for reuse. The remainder of the treated water would be injected into the **aquifer** downgradient of the VOC plume to reduce VOC movement. The treated water would be delivered to the injection field via a new pipeline to be constructed along Victory Boulevard in Burbank. Six monitoring wells would be installed to monitor the performance of the system.

3. *EXTRACT FROM NEW WELLS/TREAT/ REINJECT/REUSE*

This alternative is similar to Alternative 2 except that ten new extraction wells would be constructed to extract contaminated groundwater rather than using the eight Burbank PSD wells already in existence. The new wells would be installed just north of the Southern Pacific Railroad tracks. Although the cost of installing extraction wells will be greater than pumping the existing wells, the new wells will be

optimally located to maximize the removal of contaminants from the groundwater. The treatment, disposal, and monitoring technologies are the same as those employed in Alternative 2.

4. *EXTRACT FROM NEW AND EXISTING WELLS/ TREAT/SPREAD/REUSE*

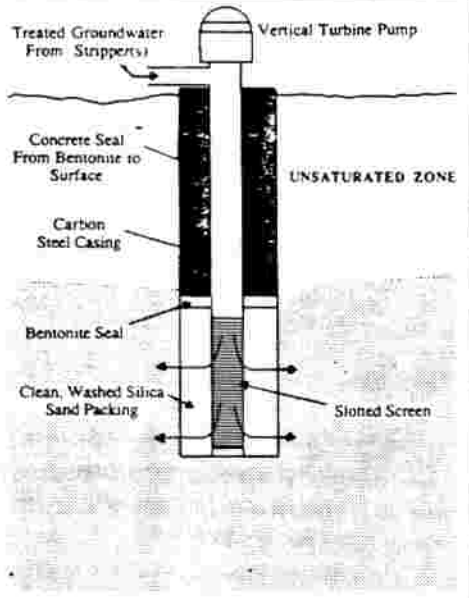
Alternative 4 was developed to compare the option of groundwater recharge by spreading with groundwater recharge using injection wells. This comparison addresses uncertainties associated with the capacity, operation and maintenance of injection wells used in Alternatives 2 and 3. Because the treated water would not be injected into the aquifer downgradient of the VOC plume as in Alternatives 2 and 3, the extraction rate of contaminated groundwater would be much higher. In this alternative, the water from ten new extraction wells and five existing Burbank PSD wells would be pumped to an existing equalization basin, which would be retrofitted to deliver two treatment streams to the treatment facility. The water would be treated by six sets of dual stage carbon air filtering units and five single-stage air strippers with carbon air filtering units, depending on the amount of water flowing into the system. Each treatment module would be designed to treat the water to exceed the ARARs. A portion of the treated water would be introduced into Burbank PSD's existing distribution system for reuse. The remainder of the treated water would be pumped to the Tujunga Spreading Grounds for recharge. As in Alternatives 2 and 3, monitoring wells would be installed to monitor the performance of the system.

5. *EXTRACT FROM NEW AND EXISTING WELLS/ TREAT/REUSE (EPA'S PREFERRED ALTERNATIVE)*

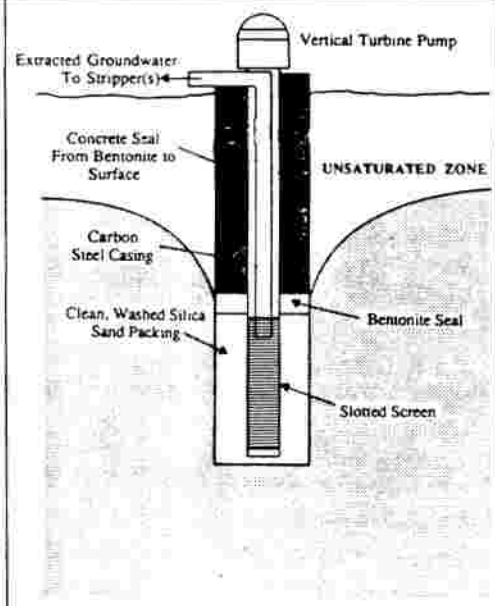
This alternative uses the same extraction, treatment, and monitoring technologies specified in Alternative 4. This alternative is unique in that all of the treated water would be used for potable water supply. The treated water would be at or below the federal MCLs and SALs. A portion of the treated water would be introduced into the Burbank PSD's existing distribution system for reuse, which would meet the City of Burbank's current average daily demand. The remainder of the treated water could be introduced into the Metropolitan Water District (MWD) Santa Monica Feeder at the Burbank PSD's Connection B1 for reuse. Under this alternative, the parties involved in this arrangement would have to enter into agreements for this exchange because the San Fernando Valley Groundwater Basin is an adjudicated basin and the net extraction of groundwater in this alternative would exceed the Burbank PSD's pumping rights (including its accumulated storage credit). Other conditions to be met include the monitoring and reporting of treated water quality, permit acquisition and operational conditions.

6. *EXTRACT FROM EXISTING WELLS/TREAT/REUSE*

Alternative 6 differs from the other ground water alternatives in that it calls for the extraction of only 4,000 gallons per minute (gpm) and consequently does not retard the migration of the plume. Two Burbank PSD wells already in existence will be used for this extraction. The extracted water would be treated in the same process as the

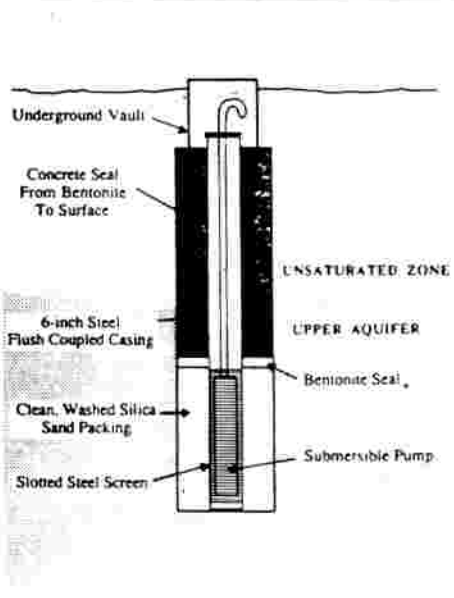


CONCEPTUAL DESIGN OF INJECTION WELL
This Technology is common to Alternatives 2 and 3.



CONCEPTUAL DESIGN OF TYPICAL EXTRACTION WELL
This technology is common to Alternatives 3,4,5 and 6.

NOTES:
1) Each well pump would have a disconnect and On/Off Switch located on central control panel near air stripper.
2) Each well pump would have a remote On/Off sensor. On/Off alarm would be located at air stripper control panel.



CONCEPTUAL DESIGN OF MONITORING WELL
This technology is common to Alternatives 2,3,4,5 and 6.

contaminated groundwater in Alternative 2: dual stage air strippers with vapor phase GAC adsorption systems. The treated water will meet or exceed all federal and state standards. Treated water then would be introduced into the Burbank PSD's existing distribution system for reuse. By extracting only 4,000 gpm, this alternative would not restrict the plume's migration, as would the extraction rates in alternatives 2,3,4, and 5 would retard plume migration.

EPA's PREFERRED ALTERNATIVE (Alternative 5)

EPA's preferred alternative is to pump and treat contaminated water from new and existing wells. The first phase will extract 12,000 gpm from eight new extraction wells and treat by air stripping with vapor phase GAC. Six dual stage aeration towers, or twelve towers in total, will be constructed on the City of Burbank's property near the intersection of Hollywood Way and Victory Blvd. The extraction wells will be strategically placed to most effectively capture the plume and extracted water will be transported to the treatment location. After the water is treated, it will be placed in Burbank's water distribution system. The treated water would be at or below the federal MCLs and State Action Levels. Six monitoring wells will be installed at the leading edge of the plume to monitor the migration of the ground water plume. Additional extraction and reuse will be evaluated in Phase II of the project as more data becomes available from the operation of the Phase I extraction system and from the ongoing remedial investigation. This alternative could result in a maximum risk of one additional case of cancer in a population of 2,000,000 people over a 70-year lifetime.

GLOSSARY

AERATION FACILITY: A treatment system that removes volatile organic compounds from contaminated water by forcing air through the water. The volatile chemicals evaporate upon exposure to the air, leaving the water clean.

ACTION LEVEL: Drinking water quality guidelines set by the California Department of Health Services (DHS) at levels to protect public health. For carcinogens in drinking water, state action levels (SALs) are based on a one-in-a-million cancer risk. This means that a person exposed to that level of contamination throughout his or her lifetime (drinking two liters a day for 70 years) has one-in-a-million chance of developing cancer because of exposure to the contaminant. For example, the action level for TCE is 5 parts per billion.

AQUIFER: An underground rock formation composed of materials such as sand, soil, or gravel that can store and supply ground water to wells and springs. Most aquifers used in the United States are within a thousand feet of the earth's surface.

ARARs: Applicable or Relevant and Appropriate Requirements. Remedial actions must comply with Federal laws and more stringent, promulgated state laws.

CONTAMINANT PLUME: A three-dimensional zone within the groundwater aquifer containing contaminants that generally move in the direction of, and with groundwater flow.

DRINKING WATER STANDARDS: The concentration of chemical contaminants established by EPA under the Safe Drinking Water Act as an acceptable level for drinking water (also termed Maximum Contaminant Levels or MCLs). To be in compliance with the Safe Drinking Water Act, water suppliers must provide water with average contaminant concentrations below the drinking water standards. Also see the definition of Action Level in the glossary.

GRANULAR ACTIVATED CARBON (GAC): An adsorptive material which attracts and holds contaminants. GAC has been demonstrated to be especially effective due to its large adsorption surface area.

GROUNDWATER: Underground water that fills pores between particles of soil, sand, and gravel or openings in rocks to the point of saturation. Where groundwater occurs in significant quantity, it can be used as a source of water supply.

MAXIMUM CONTAMINANT LEVEL (MCL): Enforceable Federal Standards that are set as close to the *Maximum Contaminant Level Goal* as feasible. MCLs are based on treatment technologies, cost, and analytical methods.

OPERABLE UNIT FEASIBILITY STUDY (OUFS): An operable unit is a discrete action that contributes to the permanent site cleanup by addressing a part of the overall problem. A number of operable units can be conducted during the course of a single Superfund project. The Feasibility Study (FS) is a major part of the Superfund process. During the FS, a report is prepared that identifies alternative actions that may be used at the site. Based on the results of the FS, EPA proposes a clean-up plan. A 30-day public comment period is conducted prior to EPA's final decision about which cleanup alternative is most appropriate.

PERCHLOROETHYLENE (PCE): A non-flammable solvent used commonly in dry cleaning and to remove grease from equipment. It is a suspected carcinogen.

REMEDIAL ACTION: The construction or implementation of the selected clean-up alternative, which occurs after the feasibility study is completed and EPA has made a formal decision.

REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS): A two-part study of a hazardous waste site that must be completed before the site remedy is implemented. The first part, or Remedial Investigation, examines the nature and extent of site contamination. The second part, or Feasibility Study, identifies and evaluates alternatives for addressing site contamination.

TRICHLOROETHYLENE (TCE): A non-flammable liquid used commonly in industrial processes and to remove grease from metal. It is a suspected carcinogen.

VOLATILE ORGANIC COMPOUNDS (VOCs): An organic (carbon containing) compound that evaporates (volatilizes) readily at room temperature.

SUMMARY AND COSTS OF ALTERNATIVES

	1	2	3	4	5 *	6
ALTERNATIVES	No Action. Includes the monitoring of 8 existing wells.	Extract 16,000 gpm from 8 existing wells.Treat with dual stage AS with vapor phase GAC. Dispose by injection in 10 new wells and reuse of 4,000 gpm. Injection wells will be placed to enhance containment.	Extract 16,000 gpm from 10 new wells. Treatment and disposal same as Alternative 2. Phased approach: Phase 1, 75% capacity (12,000 gpm); and Phase 2, 25% additional capacity, (4,000 gpm)	Extract 16,000 gpm from 10 new wells and 6,000 gpm from 5 existing wells. Treatment same as Alternative 2 for Phases 1 and 2. Phase 2 treatment is single stage AS. Disposal at spreading grounds and reuse of 4,000 gpm. Phased approach same as Alternative 3.	Extract and treat same as Alternative 4. Reuse of 22,000 gpm of treated water. Phased approach: Phase 1, 55% capacity (12,000 gpm) and Phase 2, 45% capacity (10,000 gpm)	Extract 4,000 gpm from 2 existing wells. Treat with dual stage AS with vapor phase GAC. Reuse 4,000 gpm of treated water.
EFFECTIVENESS & PERMANENCE	Continued risk of groundwater contamination. Sole reliance on institutional controls to prevent exposure.	After 20 years of extraction, concentrations of TCE in the groundwater would still exceed MCLs. Since plume migration is being diverted from its current path towards Burbank's production wells, wells could be contaminated to higher levels.	After 10 years of extraction, concentrations of TCE in the groundwater would still exceed MCL's. However, concentrations would be greatly reduced from those achieved in Alternative 2. Plume migration would be controlled as long as pumping continued or the aquifer was remediated.	Less effective than Alternative 3 but more effective than Alternative 2.	Same as Alternative 4.	Same as Alternative 1.
REDUCTION OF TOXICITY, MOBILITY, OR VOLUME	No reduction in toxicity, mobility, or volume since no treatment is employed.	Estimated to reduce TCE concentrations from 3,200 ug/l to 590 ug/l after 20 years. Continued contaminant migration will occur but is redirected towards the extraction wells.	Estimated to reduce TCE concentrations from 3,200 ug/l to 81 ug/l after 10 years. Plume migration will be effectively controlled and further aquifer contamination is not expected.	Estimated to reduce TCE concentrations from 3,200 ug/l to 122 ug/l after 10 years. Plume migration will be less effectively controlled than in Alternative 3, but more effectively controlled than in Alternative 2.	Same as Alternative 4.	Same as Alternative 1 except additional decrease of contaminant concentrations will be achieved by groundwater extraction.
COMPLIANCE WITH ARARS	Does not meet MCLs and state action levels.	Water discharged from the treatment system will meet MCLs and state action levels. Emissions from AS controlled by GAC.	Same as Alternative 2.	Same as Alternative 2.	Same as Alternative 2.	Same as Alternative 2.
OVERALL PROTECTION OF HUMAN HEALTH & ENVIRONMENT	Institutional controls will control risk of ingestion of contaminated groundwater. Environmental degradation will increase as groundwater contamination spreads.	Institutional controls will control risk of ingestion of contaminated groundwater and effectiveness of the treatment system. Environmental degradation may increase since a zone in the aquifer with apparently low contaminant concentrations could be contaminated to higher levels.	Institutional controls same as Alternative 2. Environmental degradation may be greatly reduced since the plume of groundwater contamination will be reduced in concentration and extent.	Institutional controls same as Alternative 2. Environmental degradation may be more effectively controlled than Alternative 2 but less effectively than Alternative 3.	Same as Alternative 4.	Same as Alternative 2.
IMPLEMENTABILITY	Monitoring wells would be easy to construct. Spread of the groundwater plume could make remediation more difficult in the future.	Monitoring is needed to assess effectiveness of groundwater extraction. AS with vapor phase GAC is a proven technology. Approval for hookup needed from municipal authority. Operational effectiveness of injection wells may be questionable.	Same as Alternative 2.	Same as Alternative 2 except spreading basins may be more reliable than the injection wells.	Technical implementability is the same as Alternative 2 for extraction and treatment. Administrative agreements would need to be developed between the City of Burbank, MWD, and LADWP to accomodate the exchange of water beyond the City of Burbank's water rights.	Same as Alternative 2 except injection wells are not proposed.
COST ($1,000)						
PRESENT WORTH	Total: 500	Total: 81,800	Total: 88,100	Total: 95,200	Phase 1: 69,000 Phase 2: 17,300 Total: 86,300	Total: Assumed to be 25% of the cost of Alternative 2, or $20,450
O&M TOTAL	60	45,200	44,700	52,900	43,900 10,300 54,200	
CAPITAL	0	36,600	43,400	42,300	25,100 7,000 32,100	

Present worth evaluation assumes 10 percent annual interest rate and 20 years for the project life.

* EPA's preferred alternative

FOR MORE INFORMATION

If you have any questions, comments, or concerns regarding the San Fernando Valley Groundwater Basin, please contact:

Helen King Burke

Community Relations Coordinator
U.S. EPA
215 Fremont Street (T-1-3)
San Francisco, CA 94105

Patti Cleary/Alisa Greene

Remedial Project Managers
U.S. EPA
215 Fremont Street (T- 4-1)
San Francisco, CA 94105

EPA Superfund Toll-Free Information Line: (800) 231-3075

If you call, please leave a message on the answering machine and your call will be returned as soon as possible.

Copies of the preliminary draft Operable Unit Feasibility Study and other site-related documents are available at these information repositories:

City of Burbank Public Library
110 North Glenoaks Boulevard
Burbank, California 91502

University of California, Los Angeles
University Research Library
Public Affairs Service
405 Hilgard Avenue
Los Angeles, California 90024

California State University, Northridge Library
18111 Nordhoff Street
Northridge, California, 91330

L.A. Department of Water and Power Library
111 North Hope Street, Room 518
Los Angeles, California 90012

United States
Environmental Protection Agency
Region IX

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